

WBS No: 1AAH  
Activity ID: 1AH1004001

**Rockv Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \* Starts In FY \*

WBS No: 1AAH		Title: Salt Residues											
Activity ID: 1AH1004001		Description: FY00 Salt Operations (2,800ka)						Cost Risk 1		Schedule Risk 1			
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost	
10	Operations - 2800 ka	82.00	dav	HC	255	20.880	489.500	0	0	489.500	238.344	727.844	
20	Commodities	2,800.00	ka	HC	0	0	0	527.072	0	527.072	0	527.072	
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	6.230	6.230	0	6.230	
Total for Activity 1AH1004001:						20.880	489.500	527.072	6.230	1,022.803	238.344	1,261.146	

**Line Item 10 - Operations - 2800 kg**

BOE	Two foremen supervising crew of nine process specialists with engineer support for WIPP data package and RCT support. Overtime is 20% of total hours.													
	Foreman	2 fte												
	Process Specialist	9 fte												
	Engineer	1 fte (Budgeted in Proj. Sppt.)												
	RCT	2 fte												

Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	34.00	Hours
Factors	2	Foreman	8.5	Hours/Dav	2	Shifts/Dav			
	750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KA50H	371 SS&C & Salts Steelworkers	Linear	145.80	Hours
Factors	9	Process Specialists	8.1	Hours/Dav	2	Shifts/Dav			
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	32.40	Hours
Factors	2	RCTs	8.1	Hours/Dav	2	Shifts/Dav			
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	6.80	Hours
Factors	2	Foreman	1.7	Hours/Dav	2	Shifts/Dav			
	751	OVERTIME BASE & PRE.	R010	CHEMICAL SYSTEMS OPERATOR (	KA50H	371 SS&C & Salts Steelworkers	Linear	29.16	Hours
Factors	9	Process Specialists	1.62	Hours/Dav	2	Shifts/Dav			
	751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	6.48	Hours
Factors	2	RCT's	1.62	Hours/Dav	2	Shifts/Dav			

**Line Item 20 - Commodities**

BOE	Historical Data Source - FY99 Salts Project commodities requirements for repack operations Item Desc - drums, liners, bags, filters, gloves, cans, TIDs, and tape Breakdown of Historical Data: Item - Same Units - KG of repack material Unit Cost - \$188 Unit Cost Adjustment factor - 1.0 Revised Unit Cost - \$188 Basis for adjustment - n/a													
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Resources		Cost Element	Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	KA50S	B371 SS&C and Salts	Linear	188.24	Dollars
Factors	188.24	Dollars/ka							

**Line Item SYS - Contingency And Escalation**

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	3,630.74	Dollars
	Factors 3630.74 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	2,599.72	Dollars
	Factors 2599.72 Dollars									

Activity ID: 1AH1004002		Description: FY00 Salt Management						Cost Risk 1		Schedule Risk 1		
Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Management	82.00	day	HC	15	1.220	34.127	113.611	0	147.738	16.654	164.392

WBS No: 1AAH  
Activity ID: 1AH1004002

**Rockv Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \*

Starts In FY \*

Total for Activity 1AH1004002:

1.220	34.127	113.611	0	147.738	16.654	164.392
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**Line Item 10 - Management**

BOE	Historical Data Source - FY99 Salts Project requirements Item Desc - Project management, scheduling and budget Breakdown of Historical Data: Item - Same Units - 1 day Unit Cost - \$2,000 Unit Cost Adjustment factor - 1.0 Revised Unit Cost - \$2,000 Basis for adjustment - n/a											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	KA50S	B371 SS&C and Salts	Linear	8.50	Hours
	Factors	1	Project Manager - Swartz	8.5	Hours/Dav				
	750	STRAIGHT TIME BASE	P070	COST ESTIMATORS PLANNERS AN	SA01S	SSOC 371 Closure Project	Linear	6.38	Hours
	Factors	1	Scheduler - Thompson	8.5	Hours/Dav	0.75	3/4 of Time		
	A57	LATA	P070	COST ESTIMATORS PLANNERS AN	KA50S	B371 SS&C and Salts	Linear	648.00	Dollars
	Factors	1	Budget Analyst - Patton	9	Hours/Dav	72	Dollars/Hour		
	A5H	SUBCONTRACTED SRVS	M010	FOREMEN / TEAM LEADS / GROUP	KA50S	B371 SS&C and Salts	Linear	720.00	Dollars
	Factors	1	Deputy Lead - Fenner	9	Hours/Dav	80	Dollars/Hour		
	A5R	MISC EXPENSES	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	17.50	Dollars
Factors	1	SSOC Edu Reim per HR 5.5	875	\$/atr	0.02	atrs/dav			

Activity ID: 1AH1004003 Description: FY00 Salt Support

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Salt Support	82.00	dav	HC	17	1,394	47,689	508,318	0	556,007	23,272	579,279
12	NMSLs	1.00	ea	HC	150	150	6,491	13,500	0	19,991	3,167	23,158
Total for Activity 1AH1004003:						1,544	54,179	521,818	0	575,997	26,439	602,437

**Line Item 10 - Salt Support**

BOE	Historical Data Source - FY99 Salts Project requirements Item Desc - Technical engineering support, SMEs, procedures, WIPP documenation, training and QA Breakdown of Historical Data: Item - Same Units - 1 day Unit Cost - \$7,000 Unit Cost Adjustment factor - 1.0 Revised Unit Cost - \$7,000 Basis for adjustment - n/a											
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Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	8.50	Hours
Factors	1	Tech Support Engineer-Johnson		8.5	Hours/Day				
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project		Linear	8.50	Hours
Factors	1	SME-Fisher		8.5	Hours/Day				
A52	TENERA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts		Linear	1,620.00	Dollars
Factors	2	Tech Support Engineers-		9	Hours/Day		90	Dollars/Hour	
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts		Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-		9	Hours/Day		50	Dollars/Hour	
A57	LATA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts		Linear	720.00	Dollars
Factors	1	Tech Support Engineer-Russell		9	Hours/Day		80	Dollars/Hour	
A57	LATA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts		Linear	0.00	Dollars
Factors	1	Tech Support Engineer-Conrad		9	Hours/Day		80	Dollars/Hour	0 Budgeted by others
A57	LATA	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project		Linear	720.00	Dollars
Factors	1	SME-Gettv		9	Hours/Day		80	Dollars/Hour	
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	KA10S	B371 ESH&Q		Linear	324.00	Dollars
Factors	1	Procedure Writer		4.5	Hours/Day		72	Dollars/Hour	

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Project  
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\*

Starts In FY \*

A57	LATA	P170	OTHER ADMINISTRATIVE & PROFE	SA01S	SSOC 371 Closure Project	Linear	25.00	Dollars
Factors	1	Training Admin.-Rork	0.5	Hours/Dav	50	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K266S	Envir. Safetv. Health & Quality	Linear	720.00	Dollars
Factors	1	QA Engineer-Stewart	9	Hours/Dav	80	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts	Linear	720.00	Dollars
Factors	1	Tech Support Engineer-Mullen	9	Hours/Dav	80	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts	Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-Huvett	9	Hours/Dav	50	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts	Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-Jones	9	Hours/Dav	50	Dollars/Hour		

**Line Item 12 - NMSLS**

**BOE**

Historical Data Source - FY99 NMSL development for B371 Salts Project  
Item Desc - Develop/revise nuclear material safety limit (NMSL)  
Breakdown of Historical Data:  
Item - same  
Units - 1 limit  
Unit Cost - \$23,000  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$23,000  
Basis for adjustment - n/a

**Resources**

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	KA10S	B371 ESH&Q	Linear	75.00	Hours
Factors	1	NMSL Sppt (John Winkle)	75	Hours/NMSL				
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	SA01S	SSOC 371 Closure Project	Linear	75.00	Hours
Factors	1	NMSL Sppt (Rick Moore)	75	Hours/NMSL				
A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	SA01S	SSOC 371 Closure Project	Linear	6.750.00	Dollars
Factors	1	NMSL Sppt (Mark Joseph)	75	Hours/NMSL	90	\$/Hour		
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KA10S	B371 ESH&Q	Linear	6.750.00	Dollars
Factors	1	NMSL Sppt (Ellen Saylor)	75	Hours/NMSL	90	\$/Hour		

Activity ID: 1AH1004004 Description: FY00 Salt Maintenance

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Salts Maintenance	82.00	dav	HC	10	820	18,662	12,300	0	30,962	9,107	40,068
11	Maintenance Planning	82.00	dav	HC	3	205	6,647	8,364	0	15,011	3,244	18,255
Total for Activity 1AH1004004:						1,025	25,309	20,664	0	45,973	12,351	58,323

**Line Item 10 - Salts Maintenance**

**BOE**

Historical Data Source - FY99 Salts Project requirements  
Item Desc - Maintenance for continued glovebox operations  
Breakdown of Historical Data:  
Item - Same  
Units - 1 day  
Unit Cost - \$700  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$700  
Basis for adjustment - n/a

**Resources**

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KA20H	371/374 Facility Maint Steelworkers	Linear	4.00	Hours
Factors	1	Maintenance Craft-Electrician	4	Hours/Day					
750	STRAIGHT TIME BASE		C090	STRUCTURAL AND METAL WORKE	KA20H	371/374 Facility Maint Steelworkers	Linear	4.00	Hours
Factors	1	Maintenance Craft-Metal Worker	4	Hours/Day					
750	STRAIGHT TIME BASE		M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	2.00	Hours
Factors	1	Maintenance Foreman	2	Hours/Day					
A5C	SUPPLIES		0000	NONE	SA01S	SSOC 371 Closure Project	Linear	150.00	Dollars
Factors	150	Dollars/Day							

WBS No: 1AAH  
Activity ID: 1AH1004004

**Rockv Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \*

Starts In FY \*

**Line Item 11 - Maintenance Planning**

BOE	Historical Data Source - FY99 Salts Project requirements											
	Item Desc - Engineering and planning of maintenance for continued glovebox operations											
	Breakdown of Historical Data:											
	Item - Same											
	Units - 1 day											
	Unit Cost - \$490											
	Unit Cost Adjustment factor - 1.0											
	Revised Unit Cost - \$490											
	Basis for adjustment - n/a											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	E040	ELECTRICAL ENGINEERS	SA01S SSOC 371 Closure Project	Linear	1.25	Hours
Factors	25	hours/mo	0.05	mo/dav			
750	STRAIGHT TIME BASE	E070	MECHANICAL ENGINEERS	SA01S SSOC 371 Closure Project	Linear	1.25	Hours
Factors	25	hours/mo	0.05	mo/dav			
A57	LATA	P070	COST ESTIMATORS PLANNERS AN	SA01S SSOC 371 Closure Project	Linear	90.00	Dollars
Factors	1	Planner	25	hours/mo	0.05	mo/dav	72 \$/hour
A58	ASI	0000	NONE	SA01S SSOC 371 Closure Project	Linear	12.00	Dollars
Factors	12	Dollars/Dav					

Activity ID: 1AH1004005 Description: FY00 Salt Sampling

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
B5S909525	B707 Sampling	2.00	wk	BM	82	164	3,589	900	0	4,489	1,747	6,236
B5S909528	B371 Salt WAP Sampling	17.00	wk	BM	82	1,392	30,506	5,100	0	35,606	14,850	50,456
Defer Funding	B371 Salts Sampling (06/13/00)	1.00	each	EE	0	0	0	-20,000	0	-20,000	0	-20,000
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	203	203	0	203
Total for Activity 1AH1004005:						1,556	34,095	-14,000	203	20,297	16,597	36,895

**Line Item B5S909525 - B707 Sampling**

BOE	Benchmark Source - FY00 Salts Operations Estimate											
	Benchmark Item Desc - Salts sampling occurring in repack glovebox											
	Breakdown of Benchmark Data:											
	Item -											
	Units -											
	Unit Cost -											
	Unit Cost Adjustment factor -											
	Revised Unit Cost -											
	Basis for adjustment -											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
750	STRAIGHT TIME BASE	S010	CHEMISTS	K267S Analytical Laboratory Services	Linear	9.00	Hours
Factors	1	Lab Tech.	2	hours/dav	4.5	days/wk	
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KB10H 707 Complex Steelworkers	Linear	72.90	Hours
Factors	2	RCTs	8.1	hours/dav	4.5	days/wk	
A5C	SUPPLIES	0000	NONE	SB01S SSOC 707 Closure Project	Linear	450.00	Dollars
Factors	450	\$/week					

**Line Item B5S909528 - B371 Salt WAP Sampling**

BOE	Benchmark Source - FY00 Salts Operations Estimate											
	Benchmark Item Desc - Salts sampling occurring in repack glovebox											
	Breakdown of Benchmark Data:											
	Item -											
	Units -											
	Unit Cost -											
	Unit Cost Adjustment factor -											
	Revised Unit Cost -											
	Basis for adjustment -											

Resources		Cost Element	Skill	Department	Curve	Quantity	Units
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Project Baseline Devl  
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Activity Filter \*

Starts In FY \*

750	STRAIGHT TIME BASE	S010	CHEMISTS	K267S	Analytical Laboratory Services	Linear	9.00	Hours
Factors	1	Lab Tech.	2	hours/dav	4.5	davs/wk		
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	72.90	Hours
Factors	2	RCTs	8.1	hours/dav	4.5	davs/wk		
A5C	SUPPLIES	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	300.00	Dollars
Factors	300	\$/week						

**Line Item Defer Funding - B371 Salts Sampling (06/13/00)**

BOE Estimator reduced funding by \$20,000 on 6/13/00 in order to meet K-H budget target requirement.

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5H	SUBCONTRACTED SRVS	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	-20.000.00	Dollars
	Factors      -20000      Defer funding to FY01								

**Line Item SYS - Contingency And Escalation**

BOE

Resources	<i>Cost Element</i>		<i>Skill</i>		<i>Department</i>		<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
	CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	118.85	Dollars
	<i>Factors</i> 118.853 Dollars								
	ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	83.78	Dollars
	<i>Factors</i> 83.784 Dollars								

Activity ID: 1AH1011001 Description: FY01 Salt Operations (1,200 ka)

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Operations - 1200 ka	35.00	dav	HC	255	8.912	208.933	0	0	208.933	99.661	308.594
20	Commodities	1,200.00	ka	HC	0	0	0	225.888	0	225.888	0	225.888
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	28.336	28.336	0	28.336
Total for Activity 1AH1011001:						8.912	208.933	225.888	28.336	463.157	99.661	562.818

**Line Item 10 - Operations - 1200 kg**

BOE Two foremen supervising crew of nine process specialists with engineer support for WIPP data package and RCT support. Overtime is 20% of total hours.

Foreman 2 fte  
Process Specialist 9 fte  
Engineer 1 fte (Budgeted in Proj. Sppt.)  
RCT 2 fte

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE	M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	34.00	Hours
	Factors	2	Foreman	8.5	Hours/Dav	2	Shifts/Dav		
	750	STRAIGHT TIME BASE	R010	CHEMICAL SYSTEMS OPERATOR (	KA50H	371 SS&C & Salts Steelworkers	Linear	145.80	Hours
	Factors	9	Process Specialists	8.1	Hours/Dav	2	Shifts/Dav		
	750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	32.40	Hours
	Factors	2	RCTs	8.1	Hours/Dav	2	Shifts/Dav		
	751	OVERTIME BASE & PRE.	M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	6.80	Hours
	Factors	2	Foreman	1.7	Hours/Dav	2	Shifts/Dav		
	751	OVERTIME BASE & PRE.	R010	CHEMICAL SYSTEMS OPERATOR (	KA50H	371 SS&C & Salts Steelworkers	Linear	29.16	Hours
Factors	9	Process Specialists	1.62	Hours/Dav	2	Shifts/Dav			
751	OVERTIME BASE & PRE.	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	6.48	Hours	
Factors	2	RCT's	1.62	Hours/Dav	2	Shifts/Dav			

**Line Item 20 - Commodities**

BOE Historical Data Source - FY99 Salts Project commodities requirements for repack operations  
Item Desc - drums, liners, bags, filters, gloves, cans, TIDs, and tape  
Breakdown of Historical Data:  
Item - Same  
Units - KG of repack material  
Unit Cost - \$188

WBS No: 1AAH  
Activity ID: 1AH1011001

**Rockv Flats Closure Project**  
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Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \* Starts In FY \*

Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$188  
Basis for adjustment - n/a

Resources	Cost Element		Skill		Department		Curve	Quantity	Units
	A5C	SUPPLIES	0000	NONE	KA50S	B371 SS&C and Salts	Linear	188.24	Dollars
	Factors 188.24 Dollars/ka								

**Line Item SYS - Contingency And Escalation**

BOE										
Resources										
	<i>Cost Element</i>			<i>Skill</i>		<i>Department</i>			<i>Curve</i>	<i>Quantity</i> <i>Units</i>
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department		Linear	17.096.97 Dollars
	<i>Factors</i> 17097 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department		Linear	11.238.96 Dollars
<i>Factors</i> 11239 Dollars										

Activity ID: 1AH1011002 Description: FY01 Salt Management

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Managemet	35.00	dav	HC	15	521	14.566	78.505	0	93.071	6.948	100.019
SYS	Contingency And Escalation	1.00	lea	EE	0	0	0	0	5.303	5.303	0	5.303
Total for Activity 1AH1011002:						521	14.566	78.505	5.303	98.374	6.948	105.322

**Line Item 10 - Management**

BOE		Historical Data Source - FY99 Salts Project requirements Item Desc - Project management, scheduling and budget Breakdown of Historical Data: Item - Same Units - 1 day Unit Cost - \$2,000 Unit Cost Adjustment factor - 1.0 Revised Unit Cost - \$2,000 Basis for adjustment - n/a										
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Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	750	STRAIGHT TIME BASE		M010	FOREMEN / TEAM LEADS / GROUP	KA50S	B371 SS&C and Salts	Linear	8.50	Hours
	Factors	1	Project Manager - Swartz		8.5	Hours/Dav				
	750	STRAIGHT TIME BASE		P070	COST ESTIMATORS PLANNERS AN	SA01S	SSOC 371 Closure Project	Linear	6.38	Hours
	Factors	1	Scheduler - Thompson		8.5	Hours/Dav		0.75	3/4 of Time	
	A57	LATA		P070	COST ESTIMATORS PLANNERS AN	KA50S	B371 SS&C and Salts	Linear	648.00	Dollars
	Factors	1	Budget Analyst - Patton		9	Hours/Dav		72	Dollars/Hour	
	A5H	SUBCONTRACTED SRVS		M010	FOREMEN / TEAM LEADS / GROUP	KA50S	B371 SS&C and Salts	Linear	720.00	Dollars
	Factors	1	Deputy Lead-Fenner		9	Hours/Dav		80	Dollars/Hour	
	A5R	MISC EXPENSES		0000	NONE	SA01S	SSOC 371 Closure Project	Linear	875.00	Dollars
Factors	1	SSOC Edu Reim per HR 5.5		875	\$/qtr					

**Line Item SYS - Contingency And Escalation**

BOE										
Resources	Cost Element			Skill		Department		Curve	Quantity	Units
	CON	CONTINGENCY		0000	NONE	ZDEPT	No Department	Linear	3.199.42	Dollars
	Factors 3199.42 Dollars									
	ESC	ESCALATION		0000	NONE	ZDEPT	No Department	Linear	2.103.19	Dollars
	Factors 2103.19 Dollars									

Activity ID: 1AH1011003 Description: FY01 Salt Support

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Salt Support	35.00	dav	HC	17	595	20.355	216.965	0	237.320	9.709	247.029
12	NMSLs	3.00	lea	HC	150	450	19.472	40.500	0	59.972	9.288	69.259

WBS No: 1AAH  
Activity ID: 1AH1011003

**Rockv Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \* Starts In FY \*

SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	16.768	16.768	0	16.768
Total for Activity 1AH1011003:						1.045	39.826	257.465	16.768	314.060	18.997	333.057

**Line Item 10 - Salt Support**

**BOE**

Historical Data Source - FY99 Salts Project requirements  
Item Desc - Technical engineering support, SMEs, procedures, WIPP documenation, training and QA  
Breakdown of Historical Data:  
Item - Same  
Units - 1 day  
Unit Cost - \$7,000  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$7,000  
Basis for adjustment - n/a

**Resources**

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	8.50	Hours
Factors	1	SME-Fisher	8.5	Hours/Dav				
750	STRAIGHT TIME BASE	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	8.50	Hours
Factors	1	Tech Support Engineer-Johnson	8.5	Hours/Dav				
A52	TENERA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts	Linear	1.620.00	Dollars
Factors	2	Tech Support Engineers-	9	Hours/Dav	90	Dollars/Hour		
A52	TENERA	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts	Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-	9	Hours/Dav	50	Dollars/Hour		
A57	LATA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts	Linear	0.00	Dollars
Factors	1	Tech Support Engineer-Conrad	9	Hours/Dav	80	Dollars/Hour	0	Budgeted by others
A57	LATA	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts	Linear	720.00	Dollars
Factors	1	Tech Support Engineer-Russell	9	Hours/Dav	80	Dollars/Hour		
A57	LATA	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	720.00	Dollars
Factors	1	SME-Gettv	9	Hours/Dav	80	Dollars/Hour		
A57	LATA	P160	TECHNICAL WRITERS AND EDITOR	KA10S	B371 ESH&Q	Linear	324.00	Dollars
Factors	1	Procedure Writer	4.5	Hours/Dav	72	Dollars/Hour		
A57	LATA	P170	OTHER ADMINISTRATIVE & PROFE	SA01S	SSOC 371 Closure Project	Linear	25.00	Dollars
Factors	1	Training Admin.-Rork	0.5	Hours/Dav	50	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	E110	QUALITY CONTROL ENGINEERS	K266S	Envir. Safety, Health & Quality	Linear	720.00	Dollars
Factors	1	QA Engineer-Stewart	9	Hours/Dav	80	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	KA50S	B371 SS&C and Salts	Linear	720.00	Dollars
Factors	1	Tech Support Engineer-Mullen	9	Hours/Dav	80	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts	Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-Jones	9	Hours/Dav	50	Dollars/Hour		
A5H	SUBCONTRACTED SRVS	G010	ADMINISTRATIVE ASSISTANTS	KA50S	B371 SS&C and Salts	Linear	450.00	Dollars
Factors	1	WIPP Records Administrator-Huvett	9	Hours/Dav	50	Dollars/Hour		

**Line Item 12 - NMSLS**

**BOE**

Historical Data Source - FY99 NMSL development for B371 Salts Project  
Item Desc - Develop/revise nuclear material safety limit (NMSL)  
Breakdown of Historical Data:  
Item - same  
Units - 1 limit  
Unit Cost - \$23,000  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$23,000  
Basis for adjustment - n/a

**Resources**

Cost Element		Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	KA10S	B371 ESH&Q	Linear	75.00	Hours
Factors	1	NMSL Supt (John Winkle)	75	Hours/NMSL				
750	STRAIGHT TIME BASE	E080	NUCLEAR (CRITICALITY) ENGINEER	SA01S	SSOC 371 Closure Project	Linear	75.00	Hours
Factors	1	NMSL Supt (Rick Moore)	75	Hours/NMSL				



WBS No: 1AAH  
Activity ID: 1AH1011003

**Rockv Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \*

A52	TENERA	E080	NUCLEAR (CRITICALITY) ENGINEER	SA01S	SSOC 371 Closure Project	Linear	6,750.00	Dollars
Factors	1	NMSL Sppt (Mark Joseph)	75	Hours/NMSL	90	\$/Hour		
A5H	SUBCONTRACTED SRVS	E080	NUCLEAR (CRITICALITY) ENGINEER	KA10S	B371 ESH&Q	Linear	6,750.00	Dollars
Factors	1	NMSL Sppt (Ellen Saylor)	75	Hours/NMSL	90	\$/Hour		

**Line Item SYS - Contingency And Escalation**

**BOE**

**Resources**

Cost Element		Skill		Department		Curve	Quantity	Units
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	10.117.42	Dollars
Factors	10117.4 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	6.650.84	Dollars
Factors	6650.84 Dollars							

Activity ID: 1AH1011004 Description: FY01 Salt Maintenance

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Salts Maintenance	35.00	dav	HC	10	350	7,965	5,250	0	13,215	3,799	17,015
11	Maintenance Planning	35.00	dav	HC	3	88	2,837	3,570	0	6,407	1,353	7,761
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	1,313	1,313	0	1,313
Total for Activity 1AH1011004:						438	10,802	8,820	1,313	20,936	5,153	26,089

**Line Item 10 - Salts Maintenance**

**BOE**

Historical Data Source - FY99 Salts Project requirements  
Item Desc - Maintenance for continued glovebox operations  
Breakdown of Historical Data:  
Item - Same  
Units - 1 day  
Unit Cost - \$700  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$700  
Basis for adjustment - n/a

**Resources**

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		C020	ELECTRICIANS	KA20H	371/374 Facility Mamt Steelworkers	Linear	4.00	Hours
Factors	1	Maintenance Craft-Electrician	4	Hours/Day					
750	STRAIGHT TIME BASE		C090	STRUCTURAL AND METAL WORKE	KA20H	371/374 Facility Mamt Steelworkers	Linear	4.00	Hours
Factors	1	Maintenance Craft-Metal Worker	4	Hours/Day					
750	STRAIGHT TIME BASE		M010	FOREMEN / TEAM LEADS / GROUP	SA01S	SSOC 371 Closure Project	Linear	2.00	Hours
Factors	1	Maintenance Foreman	2	Hours/Day					
A5C	SUPPLIES		0000	NONE	SA01S	SSOC 371 Closure Project	Linear	150.00	Dollars
Factors	150	Dollars/Day							

**Line Item 11 - Maintenance Planning**

**BOE**

Historical Data Source - FY99 Salts Project requirements  
Item Desc - Engineering and planning of maintenance for continued glovebox operations  
Breakdown of Historical Data:  
Item - Same  
Units - 1 day  
Unit Cost - \$490  
Unit Cost Adjustment factor - 1.0  
Revised Unit Cost - \$490  
Basis for adjustment - n/a

**Resources**

Cost Element			Skill		Department		Curve	Quantity	Units
750	STRAIGHT TIME BASE		E040	ELECTRICAL ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	1.25	Hours
Factors	25	hours/mo	0.05 mo/dav						
750	STRAIGHT TIME BASE		E070	MECHANICAL ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	1.25	Hours
Factors	25	hours/mo	0.05 mo/dav						
A57	LATA		P070	COST ESTIMATORS PLANNERS AN	SA01S	SSOC 371 Closure Project	Linear	90.00	Dollars
Factors	1	Planner	25	hours/mo	0.05	mo/dav	72	\$/hour	



WBS No: 1AAH  
Activity ID: 1AH1011004

**Rocky Flats Closure Project**  
**Baseline Cost and Basis of Estimate**

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \*

A58	ASI	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	12.00	Dollars
<i>Factors</i> 12 Dollars/Day								

**Line Item SYS - Contingency And Escalation**

**BOE**

<i>Resources</i>		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	792.51 Dollars
<i>Factors</i> 792.51 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	520.97 Dollars
<i>Factors</i> 520.969 Dollars							

Activity ID: 1AH1011005 Description: FY01 Salt Sampling (8samples/wk, 22.5wks) 180

Cost Risk 2 Schedule Risk 2

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
B5S909528	Salt WAP Sampling	22.00	wk	BM	82	1.802	39.478	6.600	0	46.078	18.831	64.909
Defer Funding	Salts Sampling (06/13/00)	1.00	each	EE	0	0	0	20.000	0	20.000	0	20.000
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	4.541	4.541	0	4.541
Total for Activity 1AH1011005:						1.802	39.478	26.600	4.541	70.619	18.831	89.450

**Line Item B5S909528 - Salt WAP Sampling**

**BOE**

Benchmark Source - FY00 Salts Operations Estimate  
Benchmark Item Desc - Salts sampling occurring in repack glovebox  
Breakdown of Benchmark Data:  
Item -  
Units -  
Unit Cost -  
Unit Cost Adjustment factor -  
Revised Unit Cost -  
Basis for adjustment -

<i>Resources</i>		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
750	STRAIGHT TIME BASE	S010	CHEMISTS	K267S	Analytical Laboratory Services	Linear	9.00 Hours
<i>Factors</i> 1 Lab Tech. 2 hours/day 4.5 days/wk							
750	STRAIGHT TIME BASE	T050	RADIATION CONTROL TECHNOLOGI	KA10H	371 Complex Steelworkers	Linear	72.90 Hours
<i>Factors</i> 2 RCTs 8.1 hours/day 4.5 days/wk							
A5C	SUPPLIES	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	300.00 Dollars
<i>Factors</i> 300 \$/week							

**Line Item Defer Funding - Salts Sampling (06/13/00)**

**BOE**

Estimator reduced funding in FY00 by \$20,000 on 6/13/00 in order to meet K-H budget target requirement. Funding was shifted into FY01.

<i>Resources</i>		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
A5H	SUBCONTRACTED SRVS	0000	NONE	SA01S	SSOC 371 Closure Project	Linear	20.000.00 Dollars
<i>Factors</i> 20000 Defer funding from FY00							

**Line Item SYS - Contingency And Escalation**

**BOE**

<i>Resources</i>		<i>Cost Element</i>	<i>Skill</i>	<i>Department</i>	<i>Curve</i>	<i>Quantity</i>	<i>Units</i>
CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	2,755.30 Dollars
<i>Factors</i> 2755.30 Dollars							
ESC	ESCALATION	0000	NONE	ZDEPT	No Department	Linear	1,785.45 Dollars
<i>Factors</i> 1785.45 Dollars							

Activity ID: 1AH1011006 Description: FY01 Salt Closeout

Cost Risk 1 Schedule Risk 1

Line Item	Description	Quantity	Units	BOE Type	Labor Hours/Unit	Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
10	Close Out	1.00	ea	BM	0	0	0	10.000	0	10.000	0	10.000
SYS	Contingency And Escalation	1.00	ea	EE	0	0	0	0	530	530	0	530
Total for Activity 1AH1011006:						0	0	10.000	530	10.530	0	10.530

WBS No: 1AAH  
Activity ID: 1AH1011006

Rockv Flats Closure Project  
Baseline Cost and Basis of Estimate

Project Baseline Devl  
WBS Filter 1AAH  
Activity Filter \* Starts In FY \*

Line Item 10 - Close Out

BOE	Benchmark Source - FY00 Salts project management and support estimates Benchmark Item Desc - Continuation of management and support for project closeout Breakdown of Benchmark Data: Item - FY99 Salts project management and support requirements Units - day Unit Cost - \$9,000 Unit Cost Adjustment factor - 5% Revised Unit Cost - \$450 per day (\$10,000 total) Basis for adjustment - Personnel will be reduced to minimal required to complete WIPP documentation and close out project.
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Resources		Cost Element	Skill	Department	Curve	Quantity	Units
A5H	SUBCONTRACTED SRVS	E130	OTHER ENGINEERS	SA01S	SSOC 371 Closure Project	Linear	10.000.00 Dollars
Factors		10000	Subcontracted Services				

Line Item SYS - Contingency And Escalation

BOE										
Resources		Cost Element		Skill		Department		Curve	Quantity	Units
		CON	CONTINGENCY	0000	NONE	ZDEPT	No Department	Linear	319.88	Dollars
Factors		319.879 Dollars								
ESC		ESCALATION		0000	NONE	ZDEPT	No Department	Linear	210.28	Dollars
Factors		210.278 Dollars								

Report Totals:

Labor Hours Total	Labor Cost Total	Materials/ Sub Cost	Contingency & Escalation	Total Prime Cost	Burden Cost	Total Cost
38.943	950.816	1.776.443	63.224	2.790.484	459.975	3.250.459